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09/693,321	10/19/2000	Mohamed M. Abdelaziz	5181-57700	8845

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EXAMINER	
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ART UNIT	PAPER NUMBER
2176	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	09/693,321	ABDELAZIZ ET AL.	
	Examiner	Art Unit	
	MAIKHANH NGUYEN	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 March 2011*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-8,10-17,19-48 and 50-57* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 3-8, 10-17, 19-48 and 50-57* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to the amendment filed 03/09/2011.

Claims 1, 3-8, 10-17, 19-48 and 50-57 are currently pending in this application. Claims 10, 44, 47, 48, 50-57 have been amended. Claims 1, 24, 42, 46, and 48 are independent Claims.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 4, 6-8, 12-17, 19-27, 30-35, 37-46, 48, and 52-57 are rejected under 35 U.S.C. 102(e) as being anticipated by **Graham et al.** (US 6594700, filed 06/14/1999).

As to Claim 42:

Graham teaches a distributed computing system (Col. 3, lines 14-28: *a distributed data processing system)*, comprising:

- a storage device (Col. 5, lines 38-52: *a storage device, such as hard disk drive 326)*; and
- a service device (a service provider; Col. 6, lines 1-11) configured to:

  provide a presentation schema advertisement (Col. 6, lines 12- 40: *internal registry 402 is an internal registry providing rapid in-memory access to a database of service registrations. ... these service registrations utilizes Extensible Markup Language (XML) documents ... the canonical representation is an XML-based representation of service advertising and lookup based upon an XML document type definition (DTD). The definition of a document type in XML consists of a set of mark-up tags and their interpretations);*

  store the presentation schema advertisement on the storage device (Col. 6, line 28 – Col. 7, line 12: *the advertisements for the services are stored)*; and

  produce results data on behalf of a client in the distributed computing system (Col. 7, lines 4 – 38: *Client protocol adapter servlets convert the client request in the requesting client's protocol to a canonical representation of the request ... respond back to the requesting client with the results of the search using the client's request protocol. Associated with the client lookup*

mechanism is the ability to broker the mechanism of client-service provider interaction.).

wherein the presentation schema advertisement includes information for enabling access to a presentation schema for presenting the results data (Col. 6, lines 12 – 65:*the canonical representation is an XML-based representation of service advertising and lookup based upon an XML document type definition (DTD). The definition of a document type in XML consists of a set of mark-up tags and their interpretations. The canonical representation is an important aspect of the present invention for providing interoperability among protocols. The role of the service advertising servlet is to convert the incoming protocol-specific data into the canonical form for service advertising in the registry. It is also responsible for protocol-specific details, such as service advertisement lifetimes or durations, service access restrictions, etc., for example Jini leasing. Similarly, the client lookup servlets are responsible for converting incoming protocol-specific queries into canonical queries in the registry).*

As to Claim 43:

Graham teaches generate the results data for the client in response to receiving a request for the results data (Col. 7, lines 4 – 38: *Client protocol adapter servlets convert the client request in the requesting client's protocol to a canonical representation of the request ... respond back to the requesting client with the results of the search using the client's request protocol. Associated with the client lookup mechanism is the ability to*

broker the mechanism of client-service provider interaction).

As to Claim 44:

Graham teaches a space service configured to provide the presentation schema advertisement stored on the storage device to the client (Col. 6, line 28 – Col. 7, line 12: *as the advertisements for the services are stored in a canonical representation within internal registry 402, protocol adapter servlets are required for conversion of the client protocol to the canonical representation)*, wherein the client is operable to display the results data in accordance with the information for presenting the results data included in the presentation schema advertisement (Col. 7, lines 4 – 38: *Client protocol adapter servlets convert the client request in the requesting client's protocol to a canonical representation of the request ... respond back to the requesting client with the results of the search using the client's request protocol. Associated with the client lookup mechanism is the ability to broker the mechanism of client-service provider interaction.).*

As to Claim 45:

Graham teaches a results space configured to store results data; wherein the service device is further configured to store the results data on the results space (Col. 6, lines 28 - 49: *The converted representation is stored in internal registry 402. Each time a new service provider advertises a new service or updated service, service provider protocol adapter servlets 406 convert the service provider's unique protocol into a canonical representation and update internal registry 402 with the new service information. At any*

one time, internal registry 402 contains an index of canonical representations of service advertisements from service providers 420, 422 and 424.).

As to Claim 1:

Graham teaches a method for presenting results data in a distributed computing environment (see the abstract), comprising:

- a service in the distributed computing environment receiving a request from a client in the distributed computing environment, wherein the client and the service execute on separate devices in the distributed computing environment (see the abstract: *a service provider protocol adapter servlet listens for service advertising requests... A client protocol adapter servlet listens for client lookup requests and looks up a corresponding service provider in the internal registry. As with service provider protocol adapter servlets, a different client protocol adapter servlet handles the details of client lookup for each particular protocol ... Once a match has been found, the client protocol adapter servlet brokers the mechanism of client-service provider interaction*; see also, Col. 4, lines 6 – 34: *distributed data processing system 100 also may be implemented as a number of different types of networks, such as, for example, an intranet, or a local area network ... home director 150 may be connected to remote appliances within the house through the power lines within the home. Each appliance may request services from the home director server, which provides those services to the clients;* see also, Figs. 1 and 7);

- in response to the request, the service generating results data for the client in the distributed computing environment (see the abstract: *a service provider protocol adapter servlet listens for service advertising requests... The client protocol adapter servlet then converts a client request into a canonical representation of the request, which is then used to look up the service required by the client. Once a match has been found, the client protocol adapter servlet brokers the mechanism of client-service provider interaction*; see also, Col. 2, lines 28-49*);*

- the service providing a presentation schema to a data presentation process in the distributed computing environment (Col. 2, lines 28-49: *The service provider protocol adapter servlets then convert the service provider's protocol into a canonical representation of service advertising. The advertisement is stored in an internal registry;* Col. 6, lines 12- 40: *internal registry 402 is an internal registry providing rapid in-memory access to a database of service registrations. ... these service registrations utilizes Extensible Markup Language (XML) documents ... the canonical representation is an XML-based representation of service advertising and lookup based upon an XML document type definition (DTD). The definition of a document type in XML consists of a set of mark-up tags and their interpretations);*

- the data presentation process accessing the presentation schema in the distributed computing environment, wherein the presentation schema includes information for presenting results data for clients in the distributed computing environment,

wherein the data presentation process and the service execute on separate devices in the distributed computing environment

(Col. 2, lines 28-49: *Client protocol adapter servlets listen for client lookup requests and look up a matching service provider. As with service provider protocol adapter servlets, a different client protocol adapter servlet handles the details of client lookup for each particular protocol. The client protocol adapter servlets then convert the client request into a canonical representation of the request, which is used to look up the services required by the client and to match these requirements against the service provider advertisements stored in the same canonical form in the internal registry. Once a match has been found, the client protocol adapter servlet brokers the mechanism of client-service provider interaction;* see also, Figs. 1 and 7);

- the data presentation process accessing the results data (Col. 2, lines 28-49: *The client protocol adapter servlets then convert the client request into a canonical representation of the request, which is used to look up the services required by the client and to match these requirements against the service provider*

advertisements stored in the same canonical form in the internal registry; see also, Fig.7); and

- the data presentation process presenting the results data for the client in accordance with the information from the presentation schema (Col. 2, lines 28-49: *Once a match has been found, the client protocol adapter servlet brokers the mechanism of client-service provider interaction;* see also, Fig.7).

As to Claim 4:

Graham teaches the data representation language is eXtensible Markup Language (Col. 6, lines 18 – 65: *the canonical representation is an XML-based representation of service advertising).*

As to Claim 6:

Graham teaches the service storing the results data on a results space in the distributed computing environment (Col. 6, line 66 – Col. 7, line 12: *as the advertisements for the services are stored in a canonical representation within internal registry 402, protocol adapter servlets are required for conversion of the client protocol to the canonical representation.).*

As to Claim 7:

Graham teaches said accessing results data for a client in the distributed computing environment comprises accessing the results data from the results space (Col. 6, lines 11 -

65: *internal registry 402 is an internal registry providing rapid in-memory access to a database of service registrations ... The converted representation is stored in internal registry 402. Each time a new service provider advertises a new service or updated service, service provider protocol adapter servlets 406 convert the service provider's unique protocol into a canonical representation and update internal registry 402 with the new service information.*

As to Claim 8:

Graham teaches providing a results advertisement for the results data stored on the results space, wherein the results advertisement includes information for enabling access of the results data; and accessing the results data from the results space in accordance with the results advertisement (Col. 2, lines 28-49: *Client protocol adapter servlets listen for client lookup requests and look up a matching service provider. As with service provider protocol adapter servlets, a different client protocol adapter servlet handles the details of client lookup for each particular protocol. The client protocol adapter servlets then convert the client request into a canonical representation of the request, which is used to look up the services required by the client and to match these requirements against the service provider advertisements stored in the same canonical form in the internal registry;* see also, Fig.7)

As to Claim 12:

Graham teaches the information for presenting results data in the presentation schema includes information to facilitate the presentation of results data to the client in an audio format *(see Fig.3 and Col. 5, lines 11- 67).*

As to Claim 13:

Graham teaches the information for presenting results data in the presentation schema includes information to facilitate the presentation of results data to the client in a visual format (Col. 2, lines 28-49: *The client protocol adapter servlets then convert the client request into a canonical representation of the request, which is used to look up the services required by the client and to match these requirements against the service provider advertisements stored in the same canonical form in the internal registry. Once a match has been found, the client protocol adapter servlet brokers the mechanism of client-service provider interaction;* see also, Fig. 7).

As to Claim 14:

Graham teaches in the information for presenting results data in the presentation schema includes information to facilitate the display of results data to the client on a display device (Col. 3, line 55 – Col. 4, line 34 and Col. 6, lines 1- 65: *Service provides may also include devices necessary for completing the requested service ... a requesting client desiring services from a service provider and a service provider for providing a service to a requesting client. ... the canonical representation is an XML-based representation of service advertising and lookup based upon an XML document type definition (DTD). The*

definition of a document type in XML consists of a set of mark-up tags and their interpretations; see also, Fig.1).

As to Claim 15:

Graham teaches the results data comprises a plurality of data elements, and wherein the presentation schema comprises a plurality of presentation elements each including information describing presentation characteristics of one or more of the plurality of data elements (Col. 3, line 55 – Col. 4, line 34 and Col. 6, lines 1- 65: *the canonical representation is an XML-based representation of service advertising and lookup based upon an XML document type definition (DTD). The definition of a document type in XML consists of a set of mark-up tags and their interpretations… the client lookup servlets are responsible for converting incoming protocol-specific queries into canonical queries in the registry).*

As to Claim 16:

Graham teaches information for locating the one or more data elements associated with the presentation element, and wherein said presenting the results data for the client in accordance with the information from the presentation schema comprises: accessing a presentation element in the plurality of presentation elements; accessing one or more data elements associated with the presentation element in accordance with the information for locating the one or more data elements included in the presentation element; and presenting the one or more data elements for the client in accordance with the

information describing the presentation characteristics of the one or more data elements included in the first presentation element (Col. 2, lines 28-49: *Client protocol adapter servlets listen for client lookup requests and look up a matching service provider. As with service provider protocol adapter servlets, a different client protocol adapter servlet handles the details of client lookup for each particular protocol. The client protocol adapter servlets then convert the client request into a canonical representation of the request, which is used to look up the services required by the client and to match these requirements against the service provider advertisements stored in the same canonical form in the internal registry. Once a match has been found, the client protocol adapter servlet brokers the mechanism of client-service provider interaction;* see also, Col. 6, line 12 – Col. 7, line 32: *the canonical representation is an XML-based representation of service advertising and lookup based upon an XML document type definition (DTD). The definition of a document type in XML consists of a set of mark-up tags and their interpretations ... It is also responsible for protocol-specific details, such as service advertisement lifetimes or durations, service access restrictions, etc., for example Jini leasing ... Client protocol adapter servlets convert the client request in the requesting client's protocol to a canonical representation of the request ... client protocol adapter servlets 404 also search internal registry 402 for the requested service advertisement in the index of service provider advertisements, and respond back to the requesting client with the results of the search using the client's request protocol. Associated with the client lookup mechanism is the ability to broker the mechanism of client-service provider interaction.).*

As to Claim 17:

Graham teaches repeating said accessing a presentation element, said accessing one or more data elements, and said presenting the one or more data elements for each of the plurality of presentation elements (Col. 6, lines 50- 65: *the canonical representation is an XML-based representation of service advertising and lookup based upon an XML document type definition (DTD). The definition of a document type in XML consists of a set of mark-up tags and their interpretations. The canonical representation is an important aspect of the present invention for providing interoperability among protocols. The role of the service advertising servlet is to convert the incoming protocol-specific data into the canonical form for service advertising in the registry. It is also responsible for protocol-specific details, such as service advertisement lifetimes or durations, service access restrictions, etc., for example Jini leasing. Similarly, the client lookup servlets are responsible for converting incoming protocol-specific queries into canonical queries in the registry).*

As to Claim 19:

Graham teaches the client is executing within a first device in the distributed computing environment, and wherein the data presentation process is executing within a second device in the distributed computing environment (Col. 6, line 12 – Col. 7, line 19: *the protocols of the requester client and the service provider are unimportant. In the present invention, a client may have a protocol which is the same as or different from that of the*

service provider because an interaction between the client and the service provider is brokered in a protocol-independent internal registry 402 ... The preferred embodiment of these service registrations utilizes Extensible Markup Language (XML) documents. The registry provides a convenient and efficient pattern matching mechanism for client lookup ... Clients 410, 412 and 416 may request a service using their own unique client protocol ... a different client protocol adapter servlet handles the details of client lookup for each protocol. Client protocol adapter servlets convert the client request in the requesting client's protocol to a canonical representation of the request.).

As to Claim 20:

Graham teaches the client receiving the results data from the service; and the client providing the results data to the data presentation process (Col. 7, lines 4 – 38: *Client protocol adapter servlets convert the client request in the requesting client's protocol to a canonical representation of the request ... respond back to the requesting client with the results of the search using the client's request protocol. Associated with the client lookup mechanism is the ability to broker the mechanism of client-service provider interaction.).*

As to Claim 21:

Graham teaches the client receiving information for accessing the results data from the service; and the client providing the information for accessing the results data to the data presentation process (Col. 6, line 50 – Col. 8, line 5: *the requesting client receiving the advertisement directly from the service provider ... the canonical representation is an*

XML-based representation of service advertising and lookup based upon an XML document type definition (DTD). The definition of a document type in XML consists of a set of mark-up tags and their interpretations ... Client protocol adapter servlets convert the client request in the requesting client's protocol to a canonical representation of the request).

As to Claim 22:

Graham teaches the client receiving information for accessing the presentation schema; and the client providing the information for accessing the presentation schema to the data presentation process (Col. 6, line 50 – Col. 8, line 5: *the requesting client receiving the advertisement directly from the service provider ... the canonical representation is an XML-based representation of service advertising and lookup based upon an XML document type definition (DTD). The definition of a document type in XML consists of a set of mark-up tags and their interpretations ... Client protocol adapter servlets convert the client request in the requesting client's protocol to a canonical representation of the request).*

As to Claim 23:

Graham teaches the client receiving the presentation schema; and the client providing the presentation schema to the data presentation process (Col. 6, line 50 – Col. 8, line 5: *the requesting client receiving the advertisement directly from the service provider ... the canonical representation is an XML-based representation of service advertising and*

lookup based upon an XML document type definition (DTD). The definition of a document type in XML consists of a set of mark-up tags and their interpretations … Client protocol adapter servlets convert the client request in the requesting client's protocol to a canonical representation of the request).

As to Claim 24:

Refer to Claim 1 above for rejection. Claim 24 is the same as Claim 1, except Claim 24 is a distributed computing system Claim and Claim 1 is a method Claim.

As to Claim 25:

Refer to the discussion of Claim 3 above for rejection.

As to Claim 26:

Graham teaches in said accessing the results data, the first device is further configured to receive the results data from the service device in one or more data representation language messages, wherein the data representation language is eXtensible Markup Language (Col. 6, lines 18 – 65: *the canonical representation is an XML-based representation of service advertising).*

As to Claim 27:

Refer to the discussion of Claim 8 above, respectively, for rejection.

As to Claim 30:

Graham teaches the information for presenting results data in the presentation schema includes information to facilitate the presentation of results data to the client in an audio format, and wherein, in said presenting the results data on the data presentation device, the first device is further configured to present the results data in an audio format on the data presentation device (Col. 5, lines 11-27 and Fig. 3).

As to Claim 31:

Graham teaches the information for presenting results data in the presentation schema includes information to facilitate the presentation of results data to the client in a visual format, and wherein, in said presenting the results data on the data presentation device, the first device is further configured to present the results data in a visual format on the data presentation device (Col. 2, lines 28-49: *The client protocol adapter servlets then convert the client request into a canonical representation of the request, which is used to look up the services required by the client and to match these requirements against the service provider advertisements stored in the same canonical form in the internal registry. Once a match has been found, the client protocol adapter servlet brokers the mechanism of client-service provider interaction;* see also, Fig. 7).

As to Claim 32:

Graham teaches the data presentation device is a display device (*see Fig.1).*

As to Claims 33 and 34:

Refer to discussions of Claims 16 and 17 above, respectively, for rejections.

As to Claim 35:

Graham teaches the first device comprises a data presentation process executable on the first device, wherein said accessing a presentation schema in the distributed computing environment, said accessing results data for a client in the distributed computing environment, and said presenting the results data are performed by the data presentation process (Col. 2, lines 28-49: *Client protocol adapter servlets listen for client lookup requests and look up a matching service provider. As with service provider protocol adapter servlets, a different client protocol adapter servlet handles the details of client lookup for each particular protocol. The client protocol adapter servlets then convert the client request into a canonical representation of the request, which is used to look up the services required by the client and to match these requirements against the service provider advertisements stored in the same canonical form in the internal registry. Once a match has been found, the client protocol adapter servlet brokers the mechanism of client-service provider interaction;* see also, Figs. 1 and 7).

As to Claim 37:

Graham teaches the first device comprises the data presentation device (*see Fig.1).*

As to Claim 38:

Graham teaches the first device further comprises: a data presentation process executable on the first device (Col. 5, lines 11-37 and Fig. 3: *Data processing system 300 is an example of a client computer ... An object oriented programming system, such as Java.TM., may run in conjunction with the operating system, providing calls to the operating system from Java programs or applications executing on data processing system 300)*; and a client process executable on the first device, wherein said access the results data generated by the service device is performed by the client process, and wherein the client process is configured to provide the results data to the data presentation process; wherein said presenting the results data is performed by the data presentation process (Col. 7, lines 4 – 38: *Client protocol adapter servlets convert the client request in the requesting client's protocol to a canonical representation of the request ... respond back to the requesting client with the results of the search using the client's request protocol. Associated with the client lookup mechanism is the ability to broker the mechanism of client-service provider interaction).*

As to Claim 39:

Refer to the discussion of Claim 24 above for rejection.

As to Claim 40:

Graham teaches a data presentation process executable on the first device; and a client process executable on the first device, configured to: receive information for accessing the presentation schema; and provide the information for accessing the presentation schema to the data presentation process; wherein said accessing a presentation schema is performed by the data presentation process in accordance with the information for accessing the presentation schema provided by the client process (Col. 2, lines 28-49: *Client protocol adapter servlets listen for client lookup requests and look up a matching service provider. As with service provider protocol adapter servlets, a different client protocol adapter servlet handles the details of client lookup for each particular protocol. The client protocol adapter servlets then convert the client request into a canonical representation of the request, which is used to look up the services required by the client and to match these requirements against the service provider advertisements stored in the same canonical form in the internal registry. Once a match has been found, the client protocol adapter servlet brokers the mechanism of client-service provider interaction;* see also, Figs. 1 and 7)

As to Claim 41:

Graham teaches a data presentation process executable on the first device; and a client process executable on the first device, configured to: access the presentation schema; and provide the presentation schema to the data presentation process; wherein said presenting the results data is performed by the data presentation process in accordance with the presentation schema provided by the client process (Col. 2, lines 28-

49: *Client protocol adapter servlets listen for client lookup requests and look up a matching service provider. As with service provider protocol adapter servlets, a different client protocol adapter servlet handles the details of client lookup for each particular protocol. The client protocol adapter servlets then convert the client request into a canonical representation of the request, which is used to look up the services required by the client and to match these requirements against the service provider advertisements stored in the same canonical form in the internal registry. Once a match has been found, the client protocol adapter servlet brokers the mechanism of client-service provider interaction;* see also, Figs. 1 and 7).

As to Claim 46:

Refer to discussion of Claim 1 above for rejection.

As to Claim 48:

Refer to discussion of Claim 1 above for rejection.

As to Claims 52-57:

Refer to discussions of Claims 12, 14-17, and 19, respectively, for rejections.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 3, 5, 36, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Graham et al.** in view of **Zintel et al.** (US 7130895).

As to Claim 3:

The combination of Graham and Zintel teaches said generating the results data is performed in response to the client sending a request message in a data representation language to the service, wherein the request message requests the service to perform a function on behalf of the client, and wherein the function generates the results data when performed by the service (Zintel: Col.37, lines 24-47 and Figs.17 and 28).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graham and Zintel because it would have provided an integrated set of addressing, naming, discovery and description processes that enables automatic, dynamic and ad-hoc self-setup by devices to interoperate with other devices on a network.

As to Claim 5:

The combination of Graham and Zintel teaches said accessing results data for a client in the distributed computing environment comprises receiving the results data from the service in one or more messages in a data representation language (Zintel: Col.37, lines 24-47 and Figs.17 and 28).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graham and Zintel because it would have provided an integrated set of addressing, naming, discovery and description processes that enables automatic, dynamic and ad-hoc self-setup by devices to interoperate with other devices on a network.

As to Claim 36:

The combination of Graham and Zintel teaches the first device further comprises a client process executable on the first device and configured to send a request message in a data representation language to the service device, wherein the service device is configured to perform a function on behalf of the client process in response to the request message, and wherein the function is configured to generate the results data when performed by the service device (Zintel: Col.37, lines 24-47 and Figs.17 and 28).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graham and Zintel because it would have provided an integrated set

of addressing, naming, discovery and description processes that enables automatic, dynamic and ad-hoc self-setup by devices to interoperate with other devices on a network.

As to Claim 47:

The combination of Graham and Zintel teaches the client component is further configured to send a message to the service requesting the results data, wherein the service is operable to generate the results data for the client in response to receiving the message. (Zintel: Col.37, lines 24-47 and Figs.17 and 28).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graham and Zintel because it would have provided an integrated set of addressing, naming, discovery and description processes that enables automatic, dynamic and ad-hoc self-setup by devices to interoperate with other devices on a network.

Response to Arguments

4. Applicants' arguments filed 03/09/2011 have been fully considered but are moot in view of the new ground(s) rejection.

Applicant argues that Graham does not teach "the data presentation process and the service execute on separate devices in the distributed computing environment".

In response, Graham teaches the data presentation process and the service execute on separate devices (*remote appliances/ the home director server*) in the distributed computing environment (*distributed data processing system 100)* [Col. 4, lines 6 – 34; see also, Figs. 1 and 7*)*.

Applicant argues that Graham does not teach "the data presentation process accessing the results data".

In response, Graham's teaching *"[T]he client protocol adapter servlets then convert the client request into a canonical representation of the request, which is used to look up the services required by the client and to match these requirements against the service provider advertisements stored in the same canonical form in the internal registry"* (Col. 2, lines 28-49) covers the claimed "the data presentation process accessing the results data".

Applicant argues that Graham does not teach "the data presentation process presenting the results data for the client in accordance with the information from the presentation schema".

In response, Graham teaches the data presentation process presenting the results data for the client in accordance with the information from the presentation schema (*Once a match has been found, the client protocol adapter servlet brokers the mechanism of client-service provider interaction;* Col. 2, lines 28-49; see also, steps 702-714 in Fig.7).

Applicant argues that Graham does not teach "a service device configured to: provide a presentation schema advertisement.., wherein the presentation schema advertisement includes information for enabling access to a presentation schema for presenting the results data".

In response, Graham teaches a service device (*a service provider*; Col. 6, lines 1-11) configured to: provide a presentation schema advertisement (*the canonical representation is an XML-based representation of service advertising and lookup based upon an XML document type definition (DTD). The definition of a document type in XML consists of a set of mark-up tags and their interpretations;* Col. 6, lines 12- 40) …wherein the presentation schema advertisement includes information for enabling access to a presentation schema for presenting the results data (*the canonical representation is an XML-based representation of service advertising and lookup based upon an XML document type definition (DTD). The definition of a document type in XML consists of a set of mark-up tags and their interpretations. The canonical representation is an important aspect of the present invention for providing interoperability among protocols. The role of the service advertising servlet is to convert the incoming protocol-specific data into the canonical form for service advertising in the registry. It is also responsible for protocol-specific details, such as service advertisement lifetimes or durations, service access restrictions, etc., for example Jini leasing. Similarly, the client lookup servlets are responsible for converting incoming protocol-specific queries into canonical queries in*

the registry; Col. 6, lines 12 – 65*).*

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maikhanh Nguyen whose telephone number is (571) 272-

4093. The examiner can normally be reached on Monday - Friday from 9:00am – 5:30 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached at (571) 272-4137.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MaiKhanh Nguyen/
Primary Examiner, Art Unit 2176